No. 3. A very perfect and beautiful illustration of the action of *exosmose*.

No. 4. These were also very good examples of *endosmose*, but as they were originally empty, they offer no illustration of *electrical* agency.

Second series.—No. 1. This was the best example of endosmose among the whole, and I think the alkalies better calculated to produce it than a solution of gum.

No. 2. These are out of order; instead of endosmose we had exosmose, and at the last examination only were they found to have gained at all.

No. 3. These are also wrong; here we had endosmose, when, according to Drs. Togno and Dutrochet, we ought to have had exosmose.

Third series.—No. 1.

Nos. 2, 3, and 4. All the results are very unsatisfactory. See Togno, in this Journal, No. VII. May, 1829, p. 81—acids, Ex. 3.

With the solution of opium I have obtained such results as would tend to show that this substance does not produce its effects by absorption, but solely by its action on the nerves of the part with which it is in contact. This is, however, but an opinion.

I do not now wish to enter into a discussion on the merits of Dr. Dutrochet's discovery, or respecting the cause which produces these singular actions. It appears to me, however, that neither electricity or galvanism are necessarily connected with the subject. In conclusion, I beg leave to state, that I differ with Dr. Togno as regards the positions laid down in his 2d, 3d, 8th, 10th, 12th, 17th, and 18th observations; for which, see his paper, as already quoted.

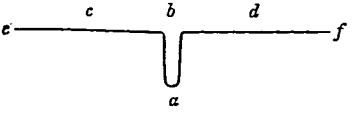
Providence, R. I. Dec. 1st, 1830.

Art. XIII. *Remarks on a Contrivance for Draining the Thorax of Liquids, excluding at the same time the Admission of Air.* By Samuel A. Cartwright, M. D. of Natchez.

THE fact, that liquids can be conducted out of the thorax by a contrivance impervious to air, is new in surgery, and may be found important in the treatment of many cases of wounds of the lungs, empyema, and dropsy.

By a letter now before me, from Dr. J. M. B. Thompson, of Louisiana, I am informed, that in three cases of hydrothorax he conducted the water out of the cavity of the chest, prevented at the same time the ingress of air, and cured his patients speedily and effectually.

A flexible metallic rod, or piece of wire, about the thickness of a common probe, and eight or ten inches in length, should be bent in the middle, so as to form a duplicature, as here represented.



The double part of the wire, *a b*, is introduced through a small incision made into the chest. The parts of the wire *c d*, lie close on the integuments of the thorax. Adhesive strips are applied over the wound and wire, to prevent the admission of air. A small part of the extremities of the wire, *e f*, should be left uncovered by the strips. The duplicature of the wire, *a b*, should be of no greater length than barely to reach the cavity of the thorax, without penetrating within that cavity. Any liquid which may become extravasated within the cavity of that side of the chest to which this instrument is applied, will pass along the wire *a b c*, and *a b d*, and make its exit drop by drop at the extremities of the wire, *e f*.

The atmospheric air will be entirely prevented from entering the cavity of the thorax by the adhesive strips. Nor will the strips covering the wire prevent the effused fluid from passing along the surface of the wire under the adhesive plaster, and dropping out at its extremities. I state this fact on the authority of Dr. Thompson. The lung, on the side to which the instrument is applied, being unoppressed by water within, or atmospheric pressure from without, continues to contract and expand; during the period a constant aqueous discharge is kept up from the cavity of the thorax. For the wire conducting off the hydropic fluid as fast as it is effused within the bag of the pleura, the oppression to respiration, from the accumulation of water, is thereby prevented. The resilience of the lung being thus preserved, greatly facilitates the cure, by placing the system in a favourable condition to be benefited by medicines.

In the event of both bags of the pleura containing water, pus, or blood, I see no reason why the operation of paracentesis thoracis should not be performed on one side, the fluid evacuated, (and if there be a probability of its re-accumulation,) the instrument under consideration applied, and the wound made air-tight by the adhesive plaster; and a similar operation could forthwith be resorted to on the other side. Thus, as fast as the fluid might be poured out within the thoracic cavities, the wires would conduct it out—the free play of the lungs being thereby preserved, the arterialization of the blood would continue to take place, and to render the system more capable of enduring the

original affection, on which the preternatural effusion might depend. In cases applicable for the contrivance here suggested to the profession for their consideration, it has been the practice to resort to repeated operations, to leave a *cannula* in the wound, or to abandon them as incurable. Repeated tappings afford only temporary benefit, while the tendency to re-accumulation continues; and the cannula, by admitting the external air within the cavity of the thorax, collapses the lung, and suspends its important function.

Natchez, 1830.

XIV. *Remarks on the Operation for the Hare-Lip.* By Zadoc Howe, M. D. of Billerica, Mass.

HAVING observed that the operation for the hare-lip generally leaves more or less of the original deformity, I several years ago adopted a mode of operating a little different from that described by surgical writers upon the subject.

The improvement consists in making two curved incisions, instead of two straight ones, in such a manner that the opening when ready to be brought together, shall resemble half of a leaf of the apple tree, cut transversely, rather than the letter V, as directed by authors.

I first used this kind of incision in a cancerous affection of the under lip. The disease lay on the lower part of the lip, and a little down upon the chin; it was thought expedient to cut through the lip for the sake of uniting the parts by the first intention; the curved incision was used at the time, rather with a view to save the destruction of sound parts, than any improvement in operating in other cases. I was gratified with the appearance of the lip when healed, and have always adopted this mode of operating since in the hare-lip, whenever circumstances would permit.

After the operation, the edge of the lip, instead of drawing in, will turn a little out, giving it more of a natural appearance; and as the perpendicular cicatrix will be somewhat lengthened, no notch will appear in the edge, a circumstance which is very liable to happen after this operation performed in the usual way. In short, it leaves rather less deformity, which all will allow is an object of some importance in operations upon the face.

I suggested the substance of these remarks to the late Professor Smith, of New Haven, several years ago. He procured a small pair of curved forceps, with a screw in the handles, on the principle of those used for breaking a stone in the bladder. His intention was

to fasten the instrument upon the lip, and cut by the side of the blades. How the doctor succeeded with his instrument, I never heard.

I have always cut by marks made with ink; and in the hare-lip, always carry one interrupted suture, with a small needle, as high as possible in the nostril, that no fissure may appear when the head is elevated. One small gold pin, a little curved, together with adhesive straps, completes the dressing.

I frequently give the incision a greater degree of curvature upon one side than the other, for the sake of saving the parts—always taking care to make the sides exactly correspond in length, and withdraw the pin in about sixty hours.*

Billerica, Dec. 1830.

ART. XV. *Cynanche Tonsillaris, terminating Fatally by Hæmorrhage.* By SAMUEL WEBBER, M. D. of Charlestown, N. H.

IN the Medico-Chirurgical Review for July of the current year, I notice several cases of hæmorrhage subsequent to cynanche tonsillaris or ulcerations of the throat, one of which proved fatal, two were barely saved by the somewhat formidable operation of tying the carotid artery, and two, after great danger and prostration, by the use of astringents combined with other treatment. These are related as unusual cases, and are in fact the first of the kind I have ever seen in print, though probably other cases have occurred, since I have myself unfortunately met with one which terminated fatally with great suddenness, and which the reading of those above-mentioned has induced me to send you for insertion in the Journal.

The case occurred late in the autumn of 1825, in the person of a young woman of about eighteen years of age, who was attacked with a severe cynanche tonsillaris. Thinking that it would get better, as this complaint frequently does, with merely domestic remedies, no professional assistance was had until the third day, when I was called in. I found the throat very much swelled, so as greatly to obstruct deglutition; any unguarded attempt to swallow being followed by severe spasmodic contraction of the fauces, and rejection of the fluid through the nostrils. The face was greatly flushed, with severe head-ache, and high symptomatic fever.

* The preceding ingenious method of operating for hare-lip, lately suggested itself to Dr. J. R. Barton, of this city, and he actually put it in practice, in September last, in the case of a boy, in the Pennsylvania Hospital. Dr. Barton supposed the method to be original with himself.—ED.

Free venesection was employed, succeeded by an active emetic, a mercurial cathartic, salines and antimonials, rubefacient liniments to the throat, pediluvium, and, on the next day the febrile symptoms being somewhat mitigated, a large blister was applied to the throat, while warm and soothing gargles, and the inhalation of steam, were used, followed by acid astringent gargles. These means had the effect of relieving the extreme irritability, tenderness, and in some degree the swelling of the fauces, but did not prevent suppuration, which was evidently established on the fourth day. The abscess in the left tonsil broke on the fifth day, and that in the right, which was less swelled, a day or two later. Great complaint was made of the extremely bad smell and bad taste of the discharge; and the relief obtained as to ease of swallowing, and the like, not being so great as is usual in such a case as this had appeared to be, the outside of the neck was carefully examined, and a small descending bag of matter was found situated in front of the thyroid cartilage, immediately beneath the skin. This was opened by the lancet, and a tea-spoonful or more of extremely fetid, thin, ill-conditioned pus discharged. A probe inserted through the opening passed obliquely upwards and backwards towards the right tonsil, apparently just in the outside of the extremity of the os hyoides. No blood was discharged except a few drops from the division of the skin. So fetid and penetrating was the odour of the pus, that it adhered to my fingers, though repeatedly washed for several days, and to my gloves which I put on on my way homeward, for three or four weeks.

On the next day after this, the patient seemed to be better, but early in the morning of the second day, her sister, who slept with her, observed her seemingly troubled with something in her throat, and was told, on inquiry, that some phlegm was there, which she wished to raise. Making an effort for this purpose, a small quantity was first raised and rejected; then a mouthful or two more tinged with blood, then clear fluid blood, which immediately after burst forth from the mouth and nostrils in as large a stream as they were capable of discharging, when the unfortunate girl sank back on the bed, with the blood still flowing copiously from her mouth, and died before an effort could be made to summon assistance out of the family.

Circumstances at the time prevented an examination, though I wished for one very much, as I was extremely at a loss to account for the hæmorrhage; not supposing at the time that suppurative inflammation of the tonsils would destroy the arteries of the part where it took place. The young woman was fond of singing, and took a prominent place among the members of our village choir; singing oftentimes with apparently great and painful exertion. It occurred

to me at the time, among other suppositions, that some aneurism might have been formed, which burst at this time under the exertion above-mentioned, or that the texture of the lungs yielded, having been weakened by undue exertion. It now seems most likely that the coats of the carotid, or of some large branch, must have been injured by the abnormal suppuration, and have given way. Some very large vessel must have been needed to supply the great discharge so instantaneously ensuing.

Charlestown, N. H. Oct. 30th. 1830.

ART. XVI. *Case of Pertussis immediately arrested by the use of Belladonna and Hydrocyanic Acid, as used by Dr. Kahleiss.* By WILLIAM W. VALK, M. D.

IN the eleventh number of this Journal, p. 238, we are informed that a combination of "belladonna, ipecacuanha, and sulphur, had been employed by Dr. KAHLEISS with the greatest success in *one hundred cases* of pertussis."

To satisfy myself with regard to this statement, and to test the virtue of these remedial agents, I resolved to give them a trial in the *first* case that offered. I was left in the dark, however, as to the *proper time* of commencing the treatment, and in this respect had to depend upon my own judgment. It affords me pleasure, however, to state, that in the only trial I have made of the treatment recommended by Dr. K. it has proved speedily successful.

About three weeks ago, my infant son, (near seven months old,) became troubled with a cough, which appeared to be the effect of having taken cold; I remarked, however, that he *only coughed while asleep*, not being *at all* affected when awake. This state lasted for near twelve days, unaccompanied with the *least* obstruction in respiration, or having any symptom of tracheal or bronchial secretion. At this time the cough became more troublesome, was attended with copious mucous secretion, occurred at regular intervals of time, and had the *peculiar sonorous sound in inspiration*, which has given to the disease its characteristic name. I treated it at first as a common catarrh, and after the accession of symptoms denoting the change already mentioned, an occasional emetic was given to throw off the accumulation of mucus in the air-passages, which was invariably swallowed during the fits of coughing. No other plan was pursued for several days, and the fits of coughing becoming more distressing, but yet unattended with "pulmonary congestion," I resolved to try the "belladonna, &c." and

accordingly prepared the following formula:—1. R. Pulv: rad. belladon. gr. 1½; pulv. Doveri, gr. 2½; sulph. præcip. ℈j.; sacch. alb. ℈ij. M. div. in chart. 20.—One powder every three hours, and between each dose twelve drops of the following:—2. R. Aqua chamomile, ℥ss.; syrupi simplex, ℥ij.; acid pruss. 6 drops. M.—These prescriptions are less in proportion than those of Dr. K. as his are for a child two years old, and nearly *four times* the above quantity for the first formulæ, and *twice* as much for the second. For *three* days, these medicines were given with *care* and *regularity*, when the relief afforded being sufficiently evident, they were omitted, (on the 11th Nov.) and from that time to the present, (18th,) the child has continued perfectly well.

The effects of these remedies were speedily manifested, (in thirty-six hours,) and I have every reason to believe that they will prove of singular efficacy in *cutting short* the progress of this distressing disease. "If the opinion prevail, that hooping-cough *will* have a definite duration, all exertions to abridge its career will be paralyzed, and the poor suffering infants and children will be deprived of even the *moderate* aid it is now in our power to give." "As regards ourselves, we are decidedly of opinion, that its duration may as certainly be *shortened* as the march of fever." Such is the opinion of Dr. Dewees, and I am fully satisfied of its correctness, being convinced that in the instance now given, I put a *complete stop to the progress of the disease*, and that too in a very short space of time. The absence of fever and inflammatory symptoms not being sufficiently obvious, prevented my using any other remedial means than those mentioned. In conclusion, I may be permitted to recommend a trial of Dr. Kahleiss's treatment, for I believe that it will be found eminently serviceable; and although I have but this *one* case to offer, it is at least of so much interest to the profession, as to warrant an adoption of the practice. The "efflorescence and dilatation of the pupil," mentioned by the doctor as happening in some cases after the employment of these remedies, were not observed—in the event of its happening, however, a suspension of the treatment for a few days, and a diminution of the proportion of belladonna, will be necessary.

P. S. I am at a loss to account for my son's having the hooping-cough at this time, as he was not exposed to *contagion*, nor am I aware that the disease exists in this town. For some valuable remarks on this subject, I would refer to Dewees's Practice, Vol. I. pages 375-6-7.

Providence, R. I. Nov. 19th, 1830.